

Listing of the Claims:

1. (Previously Presented) A monitoring system for monitoring a physiological activity of a recipient, comprising:

a set of sensors configured to be positioned on a recipient's skin to acquire physiological data;

5 a storage and analysis device connected with the sensors to interpret the acquired physiological data;

each of the sensors including at least one electrode having a working surface adapted to contact the recipient's skin, each electrode including a body of an electrically conductive elastic material with the working surface exhibiting
10 projections of the electrically conductive elastic material to enable a substantially constant position of contact with the recipient's skin.

2. (Previously Presented) A system according to claim 1, wherein the projections are arranged in a substantially uniform distributed pattern over the working surface with spacings between them.

3-5. (Cancelled)

6. (Previously Presented) A system according to claim 1, further including a wearable fabric-based elastic belt, the sensors being mounted on the elastic belt.

7-8. (Cancelled)

9. (Previously Presented) The electrode according to claim 18, further including:

an insulating plastic layer covering the skin contacting face of the electrically conductive elastic material with the surfaces of the conductive metallic
5 elements projecting through the insulating plastic layer to contact the skin.

10. (Previously Presented) The electrode according to claim 18, wherein the metallic elements are sub-millimeter sized.

11. (Previously Presented) A monitoring system for monitoring a physiological activity of a recipient, comprising:

a set of sensors including electrodes according to claim 18 to acquire physiological data;

5 a device connected with the sensors to interpret the acquired physiological data.

12. (Previously Presented) The electrode according to claim 18, further including a plurality of ventilation holes extending through the electrically conductive elastic layer.

13. (Previously Presented) The monitoring system according to claim 1, wherein the electrode includes:

5 an electrode body manufactured from the electrically conductive elastic material, the projections being integrally formed with the electrode body to provide a unitary construction.

14. (Previously Presented) The monitoring system according to claim 13, further including:

holes defined through the electrode body between the integral projections.

15. (Previously Presented) The monitoring system according to claim 1, further including:

5 a remote station which is contacted by the storage and analysis device in response to the interpretation of the acquired physiological signal detecting an abnormality.

16. (Previously Presented) The monitoring system according to claim 1, wherein the electrically conductive elastic material includes an electrically conductive rubber.

17. (Previously Presented) The system according to claim 1, further including:

5 a wearable garment with a fabric based elastic section, the sensor being mounted to the garment fabric based elastic section with the projections of the electrically conductive material facing a wearer of the garment.

18. (Previously Presented) An electrode for use in a monitoring system, the electrode comprising:

5 a layer of electrically conductive elastic material;
a plurality of prefabricated conductive metallic elements pressed into and projecting from a skin contacting face of the layer of electrically conductive elastic material, which metallic elements have surfaces configured to contact skin of a patient to be monitored.

19. (Previously Presented) The electrode according to claim 18, wherein the layer of electrically conductive elastic material is mounted to an interior of a wearable garment.

20. (Previously Presented) The electrode according to claim 18, wherein the electrically conductive elastic material includes an electrically conductive rubber.

21-22. (Cancelled)

23. (Previously Presented) An electrode having a working surface adapted to contact a recipient's skin, the electrode comprising:
a body of an electrically conductive elastic material with the working surface exhibiting projections of the electrically conductive elastic material to enable
5 a substantially constant position of contact with the recipient's skin.

24. (New) The electrode according to claim 3, wherein the projections are integrally formed with the body and of the electrically conductive elastic material.

25. (New) The electrode according to claim 23, wherein the body and the projections are fabricated of one of an electrically conductive rubber, an electrically conductive graphite, and silicon gel.

26. (New) The electrode according to claim 23, wherein the projections are integrally formed with the body and of the electrically conductive elastic material.

27. (New) The electrode according to claim 23, wherein the body is integrated with an elastic belt by a molding operation.